

Comprehensive Analysis Report

Sample Overview

Client: Intrepid Alchemy

44 Main Street, American Fork, UT

84003

Sample Name: Chou2 - Chill Tincture

Sample Matrix: Tincture Sample Lot: IM21136 Date Received: 07/08/2024

APRC #: RMH240709AA

Assay	Disposition	Date Tested
Hemp or R&D Cannabinoid Testing (Potency)	Tested	07-09-2024
Heavy Metals - Utah State Cannabis Panel	Tested	07-12-2024
Microbial: Quantitative and Pathogen Detection Combo	Tested	07-10-2024
Pesticide Screen (APRC Panel)	Tested	07-10-2024
Hemp or R&D Residual Solvents	Tested	07-11-2024
Mycotoxin Quantitation	Tested	07-10-2024



Accreditation #115229 Aromatic Plant Research Center is an ISO 17025:2017 certified laboratory.



Potency

Method: SOP 1-2026.03 Sample Name: Chou2 - Chill Tincture APRC Lot Number: RMH240709AA

Cannabinoid	RT	Total %	Total mg/g
Cannabidivarinic Acid (CBDVA)	ND	ND	ND
Cannabidivarin (CBDV)	ND	ND	ND
Cannabidiolic Acid (CBDA)	ND	ND	ND
Cannabigerolic Acid (CBGA)	ND	ND	ND
Cannabinol (CBN)	ND	ND	ND
Cannabidiol (CBD)	3.58	0.84	8.40
Cannabigerol (CBG)	ND	ND	ND
Tetrahydrocannabivarin (THCV)	ND	ND	ND
Tetrahydrocannabivarin Acid (THCVA)	ND	ND	ND
Delta-9-Tetrahydrocannabinol (Δ9-THC)	ND	ND	ND
Delta-8-Tetrahydrocannabinol (Δ8-THC)	ND	ND	ND
Tetrahydrocannabinolic acid (THCA-A)	ND	ND	ND
Cannabichromene (CBC)	ND	ND	ND
Cannabichromene Acid (CBCA)	ND	ND	ND
Δ 10 and Δ 6a,10a-Tetrahydrocannabinol, mixed isomers	ND	ND	ND
(6aR,9R)-Δ10-Tetrahydrocannabidiol	NT	NT	NT
(6aR,9S)-Δ10-Tetrahydrocannabidiol	NT	NT	NT
9(R+S)-Δ6a,10a-Tetrahydrocannabidiol	NT	NT	NT
Cannabicitran (CBTC)	ND	ND	ND

Performed by: Sujan Timsina

Reviewed by: William Deutschman

	%	mg/g
Total Cannabinoids	0.84	8.40
Total THC ^t	ND	ND
Total CBDs	0.84	8.40

 $^{
m t}$ Total Thc is calculated by $\Delta 9$ -THC +(THCA-A*0.877)

STotal CBD is calculated by CBD + (CBDA*0.877)

 $\underline{\text{LOD}} > 0.005\%$ by mass, $\underline{\text{LOQ}} > 0.01\%$ by mass



Heavy Metals

Method: CTLA Sample Name: Chou2 - Chill Tincture APRC Lot Number: RMH240709AA

Analyte	Result (ppm)	LOD (ppm)	Threshold (ppm)	Pass/Fail
Arsenic	0.187	0.001	2.00	Pass
Cadmium	<0.001	0.001	0.82	Pass
Lead	<0.001	0.001	1.20	Pass
Mercury	<0.001	0.001	0.40	Pass

Heavy metal analysis is completed in partnership with Contract Testing Laboratories of America, Orem UT.

Performed by: CTLA

Reviewed by: Jordan Morley



Microbial Impurities

Method: SOP 1-2034.01 and 1-2035.01 Sample Name: Chou2 - Chill Tincture APRC Lot Number: RMH240709AA

Total Counts			
Microbial Group:	Result (CFU/g):	Specification:	Disposition:
Total Aerobic Bacteria	<10	≤10,000	Pass
Total Yeast and Mold	<10	≤1,000	Pass

Specific Organism Identification				
Microbial Organism:	Result:	Specification:	Disposition	
Aspergillus flavus	NT	NT	Not Tested	
Aspergillus fumigatus	NT	NT	Not Tested	
Aspergillus niger	NT	NT	Not Tested	
Aspergillus terreus	NT	NT	Not Tested	
E. coli	Not Detected	Not Detected	Pass	
STEC	NT	NT	Not Tested	
Salmonella - Specific Gene	Not Detected	Not Detected	Pass	
Staphylococcus aureus	Not Detected	Not Detected	Pass	
Pseudomonas aeruginosa	Not Detected	Report Only	Tested	

Performed by: <u>Jordan Morley</u> Notes: Foreign Matter: Not Detected.

Reviewed by: <u>Tessa Crook</u>



Pesticides

Method: Sample Name: Chou2 - Chill Tincture APRC Lot Number: RMH240709AA

Pesticide:	Finding	Action Limit (μg/g)	Pass/Fail	
Abamectin	ND	0.5	Pass	
Acephate	ND	0.4	Pass	
Acequinocyl	ND	2.0	Pass	
Acetamiprid	ND	0.2	Pass	
Aldicarb	ND	0.4	Pass	
Azoxystrobin	ND	0.2	Pass	
Bifenazate	ND	0.2	Pass	
Bifenthrin	ND	0.2	Pass	
Boscalid	ND	0.4	Pass	
Carbaryl	ND	0.2	Pass	
Carbofuran	ND	0.2	Pass	
Chlorantraniliprole	ND	0.2	Pass	
Chlorfenapyr	ND	1.0	Pass	
Chlorpyrifos	ND	0.2	Pass	
Clofentezine	ND	0.2	Pass	
Cyfluthrin	ND	1.0	Pass	
Cypermethrin	ND	1.0	Pass	
Daminozide	ND	1.0	Pass	
Dichlorvos	ND	0.1	Pass	
Diazinon	ND	0.2	Pass	
Dimethoate	ND	0.2	Pass	
Ethoprophos	ND	0.2	Pass	
Etofenprox	ND	0.4	Pass	
Etoxazole	ND	0.2	Pass	
Fenoxycarb	ND	0.2	Pass	
Fenpyroximate	ND	0.4	Pass	
Fipronil	ND	0.4	Pass	
Flonicamid	ND	1.0	Pass	
Fludioxonil	ND	0.4	Pass	

Pesticide:	Finding	Action Limit (µg/g)	Pass/Fai
Hexythiazon	ND	1.0	Pass
Imazal	ND	0.2	Pass
Imidacloprid	ND	0.4	Pass
Kresoxim-methyl	ND	0.4	Pass
Malathion A	ND	0.2	Pass
Metalaxyl	ND	0.2	Pass
Methiocarb	ND	0.2	Pass
Methomyl	ND	0.4	Pass
Methylparathion	ND	0.2	Pass
MGK-264	ND	0.2	Pass
Myclobutanil	ND	0.2	Pass
Naled	ND	0.5	Pass
Oxamyl	ND	1.0	Pass
Paclobutrazol	ND	0.4	Pass
Permethrins	ND	0.2	Pass
Phosmet	ND	0.2	Pass
Piperonylbutoxide	ND	2.0	Pass
Prallethrin	ND	0.2	Pass
Propiconazole	ND	0.4	Pass
Propoxur	ND	0.2	Pass
Pyrethrin	ND	1.0	Pass
Pyridaben	ND	0.2	Pass
Spinosad	ND	0.2	Pass
Spinetoram	ND	0.1	Pass
Spirotetramat	ND	0.2	Pass
Spiroxamine	ND	0.4	Pass
Tebuconazole	ND	0.4	Pass
Thiacloprid	ND	0.2	Pass
Thiamethoxam	ND	0.2	Pass
Trifloxystrobin	ND	0.2	Pass

Performed by:

Nicholas Saichek Reviewed by:

<u>William</u> <u>Deutschman</u>

Pesticide testing performed in a non-ISO 17025:2017 accredited facility. Pass/Fail determinations based on Utah Administrative Rule R68-29.



Residual Solvents

Method: SOP 1-2027.03 Sample Name: Chou2 - Chill Tincture APRC Lot Number: RMH240709AA

Residual Solvent Finding (μg/g) Action Level (μg/g) P Dimethyl sulfoxide ND 5000 P N,N-dimethylacetamide ND 1090 P 1,2 Dimethoxyethane ND 100 P 1,4 Dioxane ND 380 P 1-Butanol ND 5000 P 1-Pentanol ND 5000 P 1-Propanol ND 5000 P 2-Butanone ND 5000 P 2-Butanol ND 5000 P 2-Butanol ND 5000 P 2-Ethoxyethanol ND 160 P 2-Methylbutane ND 5000 P 2-Propanol 24.114 5000 P Acetone ND 5000 P Acetone ND 410 P Butane ND 5000 P Cyclohexane ND 3880 P Dichloromethane <th></th> <th>A - 12 - 12 - 13</th> <th>eta din a di se</th> <th>Desideral S. I</th>		A - 12 - 12 - 13	eta din a di se	Desideral S. I
N,N-dimethylacetamide ND 1090 1,2 Dimethoxyethane ND 100 1,4 Dioxane ND 380 1-Butanol ND 5000 1-Pentanol ND 5000 1-Propanol ND 5000 2-Butanone ND 5000 2-Butanol ND 5000 2-Butanol ND 5000 2-Ethoxyethanol ND 160 2-Methylbutane ND 5000 2-Propanol 24.114 5000 Acetone ND 5000 Acetonitrile ND 410 Benzene ND 2 Butane ND 5000 Cumene ND 70 Cyclohexane ND 3880 Dichloromethane ND 600 2,2-Dimethylbutane ND 290 2,3-Dimethylbutane ND See Total Xylenes nylene ND See Total Xylenes Ethanol	Pass/Fail	Action Level (µg/g)	Finding (µg/g)	Residual Solvent
1,2 Dimethoxyethane ND 100 1,4 Dioxane ND 380 1-Butanol ND 5000 1-Pentanol ND 5000 1-Propanol ND 5000 2-Butanone ND 5000 2-Butanol ND 5000 2-Ethoxyethanol ND 160 2-Methylbutane ND 5000 2-Propanol 24.114 5000 Acetone ND 5000 Acetonitrile ND 410 Benzene ND 2 Butane ND 5000 Cumene ND 70 Cyclohexane ND 3880 Dichloromethane ND 600 2,2-Dimethylbutane ND 290 2,3-Dimethylbutane ND See Total Xylenes o-Xylene ND See Total Xylenes Ethanol 52.240 5000	Pass	5000	ND	Dimethyl sulfoxide
1,4 Dioxane ND 380 1-Butanol ND 5000 1-Pentanol ND 5000 1-Propanol ND 5000 2-Butanone ND 5000 2-Butanol ND 5000 2-Ethoxyethanol ND 160 2-Methylbutane ND 5000 2-Propanol 24.114 5000 Acetone ND 5000 Acetonitrile ND 410 Benzene ND 2 Butane ND 5000 Cumene ND 70 Cyclohexane ND 3880 Dichloromethane ND 600 2,2-Dimethylbutane ND 290 2,3-Dimethylbutane ND See Total Xylenes o-Xylene ND See Total Xylenes Ethanol 52.240 5000	Pass	1090	ND	N,N-dimethylacetamide
1-Butanol ND 5000 1-Pentanol ND 5000 1-Propanol ND 5000 2-Butanone ND 5000 2-Butanol ND 5000 2-Ethoxyethanol ND 160 2-Methylbutane ND 5000 2-Methylbutane ND 5000 2-Propanol 24.114 5000 Acetone ND 5000 Acetonitrile ND 410 Benzene ND 2 Butane ND 5000 Cumene ND 70 Cyclohexane ND 3880 Dichloromethane ND 600 2,2-Dimethylbutane ND 290 2,3-Dimethylbutane ND See Total Xylenes o-Xylene ND See Total Xylenes Ethanol 52.240 5000	Pass	100	ND	1,2 Dimethoxyethane
1-Pentanol ND 5000 1-Propanol ND 5000 2-Butanone ND 5000 2-Butanol ND 5000 2-Ethoxyethanol ND 160 2-Methylbutane ND 5000 2-Propanol 24.114 5000 Acetone ND 5000 Acetonitrile ND 410 Benzene ND 2 Butane ND 5000 Cumene ND 70 Cyclohexane ND 3880 Dichloromethane ND 600 2,2-Dimethylbutane ND 290 2,3-Dimethylbutane ND See Total Xylenes o-Xylene ND See Total Xylenes Ethanol 52.240 5000	Pass	380	ND	1,4 Dioxane
1-Propanol ND 5000 2-Butanone ND 5000 2-Butanol ND 5000 2-Ethoxyethanol ND 160 2-Methylbutane ND 5000 2-Propanol 24.114 5000 Acetone ND 5000 Acetonitrile ND 410 Benzene ND 2 Butane ND 5000 Cumene ND 70 Cyclohexane ND 3880 Dichloromethane ND 600 2,2-Dimethylbutane ND 290 2,3-Dimethylbutane ND See Total Xylenes o-Xylene ND See Total Xylenes Ethanol 52.240 5000	Pass	5000	ND	1-Butanol
2-Butanone ND 5000 2-Butanol ND 5000 2-Ethoxyethanol ND 160 2-Methylbutane ND 5000 2-Propanol 24.114 5000 Acetone ND 5000 Acetonitrile ND 410 Benzene ND 2 Butane ND 5000 Cumene ND 70 Cyclohexane ND 3880 Dichloromethane ND 600 2,2-Dimethylbutane ND 290 2,3-Dimethylbutane ND 290 m,p-Xylene ND See Total Xylenes Ethanol 52.240 5000	Pass	5000	ND	1-Pentanol
2-Butanol ND 5000 2-Ethoxyethanol ND 160 2-Methylbutane ND 5000 2-Propanol 24.114 5000 Acetone ND 5000 Acetonitrile ND 410 Benzene ND 2 Butane ND 5000 Cumene ND 70 Cyclohexane ND 3880 Dichloromethane ND 600 2,2-Dimethylbutane ND 290 2,3-Dimethylbutane ND See Total Xylenes nyp-Xylene ND See Total Xylenes Ethanol 52.240 5000	Pass	5000	ND	1-Propanol
2-Ethoxyethanol ND 160 2-Methylbutane ND 5000 2-Propanol 24.114 5000 Acetone ND 5000 Acetonitrile ND 410 Benzene ND 2 Butane ND 5000 Cumene ND 70 Cyclohexane ND 3880 Dichloromethane ND 600 2,2-Dimethylbutane ND 290 2,3-Dimethylbutane ND See Total Xylenes nyp-Xylene ND See Total Xylenes Ethanol 52.240 5000	Pass	5000	ND	2-Butanone
2-Methylbutane ND 5000 2-Propanol 24.114 5000 Acetone ND 5000 Acetonitrile ND 410 Benzene ND 2 Butane ND 5000 Cumene ND 70 Cyclohexane ND 3880 Dichloromethane ND 600 2,2-Dimethylbutane ND 290 2,3-Dimethylbutane ND 290 m,p-Xylene ND See Total Xylenes o-Xylene ND See Total Xylenes Ethanol 52.240 5000	Pass	5000	ND	2-Butanol
2-Propanol 24.114 5000 Acetone ND 5000 Acetonitrile ND 410 Benzene ND 2 Butane ND 5000 Cumene ND 70 Cyclohexane ND 3880 Dichloromethane ND 600 2,2-Dimethylbutane ND 290 2,3-Dimethylbutane ND 290 m,p-Xylene ND See Total Xylenes o-Xylene ND See Total Xylenes Ethanol 52.240 5000	Pass	160	ND	2-Ethoxyethanol
Acetone ND 5000 Acetonitrile ND 410 Benzene ND 2 Butane ND 5000 Cumene ND 70 Cyclohexane ND 3880 Dichloromethane ND 600 2,2-Dimethylbutane ND 290 2,3-Dimethylbutane ND 290 m,p-Xylene ND See Total Xylenes o-Xylene ND See Total Xylenes Ethanol 52.240 5000	Pass	5000	ND	2-Methylbutane
Acetonitrile ND 410 Benzene ND 2 Butane ND 5000 Cumene ND 70 Cyclohexane ND 3880 Dichloromethane ND 600 2,2-Dimethylbutane ND 290 2,3-Dimethylbutane ND 290 m,p-Xylene ND See Total Xylenes o-Xylene ND See Total Xylenes Ethanol 52.240 5000	Pass	5000	24.114	2-Propanol
Benzene ND 2 Butane ND 5000 Cumene ND 70 Cyclohexane ND 3880 Dichloromethane ND 600 2,2-Dimethylbutane ND 290 2,3-Dimethylbutane ND 290 m,p-Xylene ND See Total Xylenes o-Xylene ND See Total Xylenes Ethanol 52.240 5000	Pass	5000	ND	Acetone
Butane ND 5000 Cumene ND 70 Cyclohexane ND 3880 Dichloromethane ND 600 2,2-Dimethylbutane ND 290 2,3-Dimethylbutane ND 290 m,p-Xylene ND See Total Xylenes o-Xylene ND See Total Xylenes Ethanol 52.240 5000	Pass	410	ND	Acetonitrile
Cumene ND 70 Cyclohexane ND 3880 Dichloromethane ND 600 2,2-Dimethylbutane ND 290 2,3-Dimethylbutane ND 290 m,p-Xylene ND See Total Xylenes o-Xylene ND See Total Xylenes Ethanol 52.240 5000	Pass	2	ND	Benzene
Cyclohexane ND 3880 Dichloromethane ND 600 2,2-Dimethylbutane ND 290 2,3-Dimethylbutane ND 290 m,p-Xylene ND See Total Xylenes o-Xylene ND See Total Xylenes Ethanol 52.240 5000	Pass	5000	ND	Butane
Dichloromethane ND 600 2,2-Dimethylbutane ND 290 2,3-Dimethylbutane ND 290 m,p-Xylene ND See Total Xylenes o-Xylene ND See Total Xylenes Ethanol 52.240 5000	Pass	70	ND	Cumene
2,2-Dimethylbutane ND 290 2,3-Dimethylbutane ND 290 m,p-Xylene ND See Total Xylenes o-Xylene ND See Total Xylenes Ethanol 52.240 5000	Pass	3880	ND	Cyclohexane
2,3-Dimethylbutane ND 290 m,p-Xylene ND See Total Xylenes o-Xylene ND See Total Xylenes Ethanol 52.240 5000	Pass	600	ND	Dichloromethane
m,p-Xylene ND See Total Xylenes o-Xylene ND See Total Xylenes Ethanol 52.240 5000	Pass	290	ND	2,2-Dimethylbutane
o-Xylene ND See Total Xylenes Ethanol 52.240 5000	Pass	290	ND	2,3-Dimethylbutane
Ethanol 52.240 5000	Pass	See Total Xylenes	ND	m,p-Xylene
	Pass	See Total Xylenes	ND	o-Xylene
Ethyl Acetate ND 5000	Pass	5000	52.240	Ethanol
	Pass	5000	ND	Ethyl Acetate
Ethyl Benzene ND See Total Xylenes	Pass	See Total Xylenes	ND	Ethyl Benzene
Ethyl Ether ND 5000	Pass	5000	ND	Ethyl Ether
Ethylene Glycol ND 620	Pass	620	ND	Ethylene Glycol
Ethylene Oxide ND 50	Pass	50	ND	Ethylene Oxide

Residual Solvent	Finding (µg/g)	Action Level (µg/g)	Pass/Fail	
Heptane	ND	5000	Pass	
Hexane	10.180	290	Pass	
Isopropyl Acetate	ND	5000	Pass	
Methanol	ND	3000	Pass	
Methylpropane	ND	5000	Pass	
2-Methylpentane	ND	290	Pass	
3-Methylpentane	ND	290	Pass	
N,N-Dimethylformamide	ND	880	Pass	
Pentane	56.748	5000	Pass	
Propane	ND	5000	Pass	
Pyridine	ND	100	Pass	
Sulfolane	ND	160	Pass	
Tetrahydrofuran	ND	720	Pass	
Toluene	ND	890	Pass	
Total Xylenes	ND	2170	Pass	

† Per Utah state code 4-41a-701(3) Section R68-29-6 ‡ Total Xylenes is a combination of the following: o-Xylene, m-Xylene, p-Xylene, and Ethylbenzene

> Overall Disposition: <u>Pass</u> Performed By: <u>Anil Rokaya</u> Reviewed By: <u>Riley Hunter</u>



Mycotoxins

Method: Mycotoxin Sample Name: Chou2 - Chill Tincture APRC Lot Number: RMH240709AA

Mycotoxin	Finding (μg/kg)	Limit(μg/kg)	Pass/Fail
Aflatoxin B1:	ND	70	
Aflatoxin B2:	ND		
Aflatoxin G1:	ND		
Aflatoxin G2:	ND		
Total Aflatoxins:	0	20	Pass
Ochratoxin A:	ND	20	Pass

Performed by: Nicholas Saichek

Reviewed by: William Deutschman

Approved By:

Will Det

William A. Deutschman, Ph.D.

Laboratory Director - APRC Lehi Mycotoxim testing performed in a non-ISO 17025:2017 accredited facility. Pass/Fail determinations based on Utah Administrative Rule R68-29. 07/15/2024